

Tao Lu

[isthatdistance](#) | [Tao Lu](#) | [isthatdistance.github.io](#) | luttul@gatech.edu |

RESEARCH INTEREST

My research interest is to study how to extend human's ability or increase their performance and engagement on a wide range of **tasks** through different **environments**. My goal is to design interactions that maximize the power of the environment and minimize the difficulty of the task. The environments I touched in my past research are primarily *extended reality* and *mobile platforms*, and some tasks I have been working on are *data visualization* and *data collections*.

In the future, I'm going to approach my goal by exploring how **algorithms** can be incorporated in the environment to support more personalized and situated interactions.

EDUCATION

2023 - present	Georgia Institute of Technology <i>MS, Human-Computer Interaction</i> (expected)	(GPA: 4.0/4.0)
2021 - 2023	University of Michigan <i>BS, Computer Science</i>	(GPA: 3.9/4.0)
2019 - 2023	Shanghai Jiao Tong University <i>BS, Electrical and Computer Engineering</i>	(GPA: 3.8/4.0)

WORK EXPERIENCE

Research Assistant Advised by Dr. Yalong Yang on immersive data storytelling	Sept 2023 - present
Teaching Assistant Human-AI Interaction by Dr. Christopher J. MacLellan	Jan 2024 - Apr 2024
Research Assistant Advised by Dr. Anhong Guo on interactions on mobile devices	Apr 2022 - May 2023

PUBLICATIONS

Tao Lu, Hongxiao Zheng, Tianying Zhang, Xuhai Xu, and Anhong Guo (2024). "InteractOut: Leveraging Interaction Proxies as Input Manipulation Strategies for Reducing Smartphone Overuse". In: *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*.

IN-SUBMISSIONS

Zhu, Qian, **Tao Lu**, Shunan Guo, Xiaojuan Ma, and Yalong Yang (2024). "CompositingVis: Exploring Interactions for Creating Composite Visualizations in Immersive Environments". In: *Submission to IEEE VIS24, Under Review*.

SELECTED PROJECTS

Understanding Perspective Change in Immersive Data Storytelling with Spatial Context (*Aiming for CHI 2025*) Apr 2024 - present

We simulated spatial-related data storytelling in Virtual Reality (VR) using Unity3D game engine and compared active vs. passive reader perspective change in story progress control.

My Role: Leading Investigator

I led the research ideations (literature reviews). I'm also going to be responsible for implementations (VR development), evaluations (study and result analysis) and documentations (paper writing).

Mixplorer: A Mixed-Reality Object Placement Data Collection Tool Jan 2023 - Apr 2023

We created a mixed-reality object placement data collection tool, instantiating human-in-the-loop human-AI collaboration where AI provides suggestions and users modify the suggestions for model improvement.

My Role: Investigator

I led the UI development in SwiftUI. I am also involved in AR development for object placement and research ideations.

A full list of projects is on [my website](#).

SKILLS

VR Development	Unity3D (C#), Meta Quest Link, SteamVR, Mixed-Reality Recording
Mobile Development	Android (Java+Kotlin), IOS (SwiftUI), Firebase
Quantitative Data Analysis	R script, Python
Web Development	React, D3

AWARDS

Summa Cum Laude May 2023
University of Michigan

Dean's List Fall 2021, Winter 2022
University of Michigan

Tang Junyuan Scholarship Nomination Award July 2021
Shanghai Jiao Tong University

Undergraduate Excellent Scholarship Nov 2020
Shanghai Jiao Tong University

The John Wu & Jane Sun Sunshine Scholarship Oct 2020
Shanghai Jiao Tong University

Chinese National Scholarship Sept 2020
Ministry of Education of the People's Republic of China